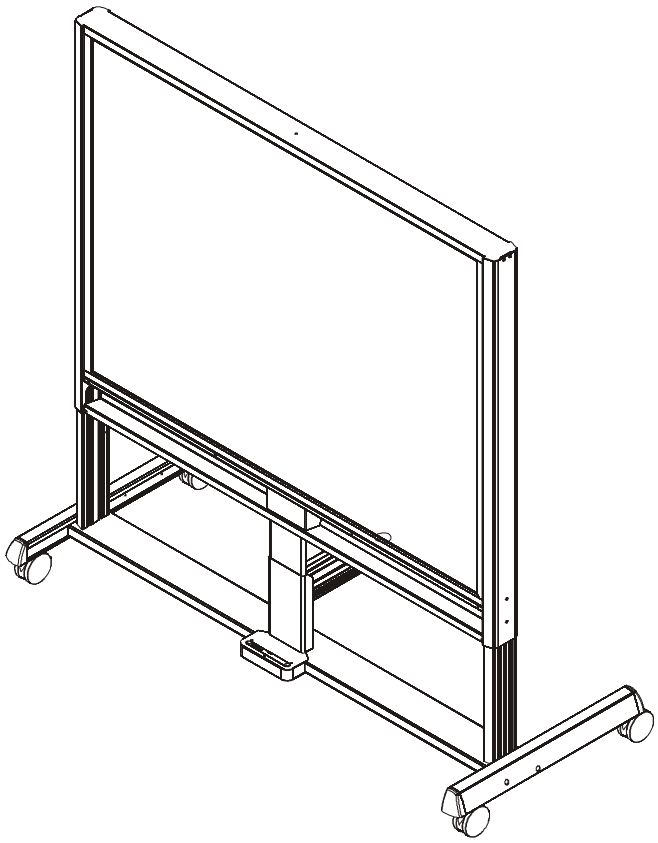
INSTALLATION INSTRUCTIONS



IDEA™ Interactive Rear Projector Cart

DA-LITE®

22516/22951

DISCLAIMER

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IMPORTANT SAFETY INSTRUCTIONS

WARNING: A WARNING alerts you to the possibility of serious injury or death if you do not follow the instructions.

CAUTION: A CAUTION alerts you to the possibility of damage or destruction of equipment if you do not follow the corresponding instructions.

WARNING: Failure to read, thoroughly understand, and follow all instructions can result in serious personal injury, damage to equipment, or voiding of factory warranty! It is the installer’s responsibility to make sure all components are properly assembled and installed using the instructions provided.

WARNING: Failure to provide adequate structural strength for this component can result in serious personal injury or damage to equipment! It is the installer’s responsibility to make sure the structure to which this component is attached can support five times the combined weight of all equipment. Reinforce the structure as required before installing the component.

WARNING: Exceeding the weight capacity can result in serious personal injury or damage to equipment! It is the installer’s responsibility to make sure the combined weight of all components located on the projector boom arm do not exceed 25 lbs (11.34 kg).

WARNING: Use this mounting system only for its intended use as described in these instructions. Do not use attachments not recommended by the manufacturer.

WARNING: Never operate this mounting system if it is damaged. Return the mounting system to a service center for examination and repair.

WARNING: Do not use this product outdoors.

--SAVE THESE INSTRUCTIONS--

eBeam™ Interactive System Requirements

The eBeam™ Interactive system works with standard projectors and Windows® and Macintosh® computers.

IMPORTANT ! : After adding batteries to the stylus (FF), tighten the cap **only** to the point of being fingertip-tight. Over-tightening cap may cause the stylus to stop transmitting signals.

Minimum System Requirements

- Windows® System
  - Compatible PC with Pentium™ II 400 MHz+ processor and 256 MB RAM
  - Windows 2000, XP, Server 2003, Vista, or 7
  - 30 MB available hard drive space
  - Available USB port
- Macintosh® System
  - Power PC®/Intel™ 1.42 GHz+ processor and 1G RAM
  - Mac OS X 10.5 through 10.6
  - 25 MB available hard drive space
  - Available USB port

Active Capture Area Size

- The maximum active capture area supported is: 4 ft x 7 ft or up to 94 inches diagonal measure.
- The minimum active capture area supported is: 1.7 ft x 1.1 ft.

Connection Requirement

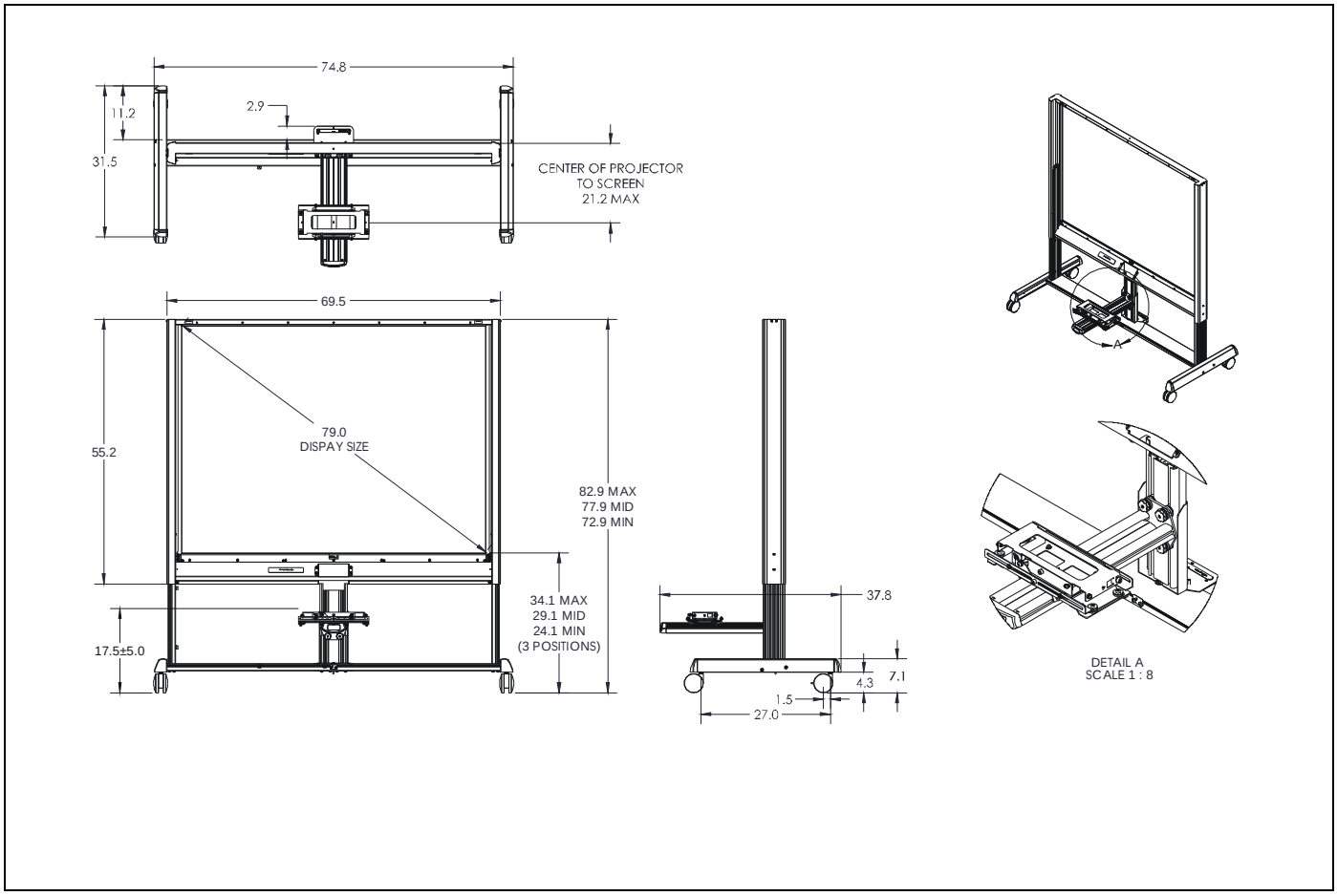
- The interactive mount includes a USB cable.

Screen Recording Requirements

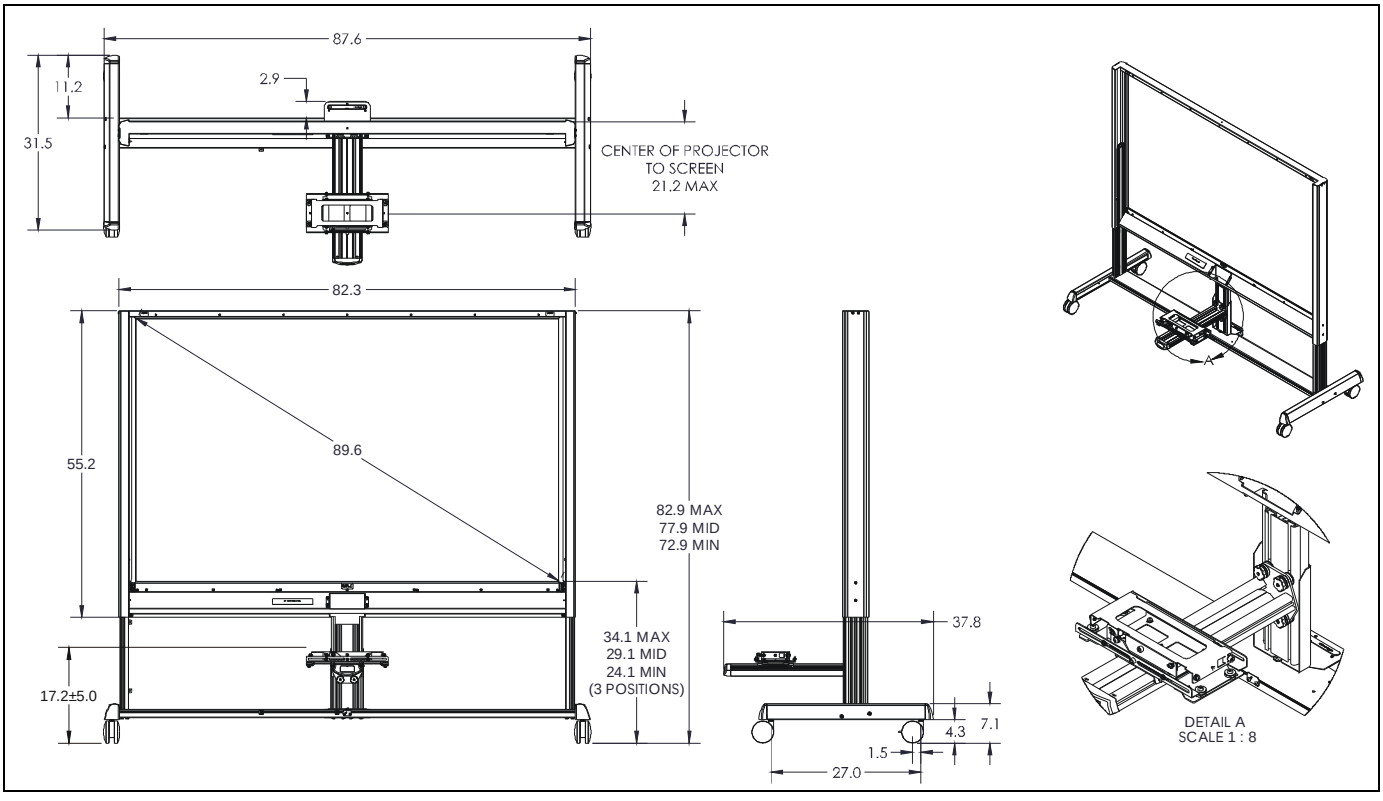
(Currently available only on Windows platform.)

- Pentium™ IV processor
- 1.4GHz, with 512MB RAM

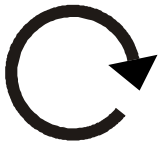
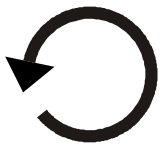
DIMENSIONS-3:4 Cart



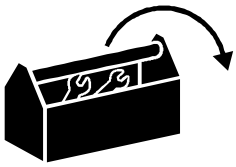
DIMENSIONS-16:10 Cart

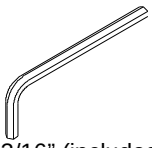


LEGEND

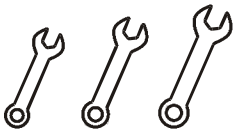
	Tighten Fastener Apretar elemento de fijación Befestigungsteil festziehen Apertar fixador Serrare il fissaggio Bevestiging vastdraaien Serrez les fixations
	Loosen Fastener Aflojar elemento de fijación Befestigungsteil lösen Desapertar fixador Allentare il fissaggio Bevestiging losdraaien Desserrez les fixations
	Phillips Screwdriver Destornillador Phillips Kreuzschlitzschraubendreher Chave de fendas Phillips Cacciavite a stella Kruiskopschroevendraaier Tournevis à pointe cruciforme
	Open-Ended Wrench Llave de boca Gabelschlüssel Chave de bocas Chiave a punte aperte Steeksleutel Clé à fourche
	By Hand A mano Von Hand Com a mão A mano Met de hand À la main
	Hex-Head Wrench Llave de cabeza hexagonal Sechskantschlüssel Chave de cabeça sextavada Chiave esagonale Zeskantsleutel Clé à tête hexagonale
	Pencil Mark Marcar con lápiz Stiftmarkierung Marcar com lápis Segno a matita Potloodmerkteken Marquage au crayon
	Drill Hole Perforar Bohrloch Fazer furo Praticare un foro Gat boren Percez un trou
	Adjust Ajustar Einstellen Ajustar Regolare Afstellen Ajuster
	Remove Quitar Entfernen Remover Rimuovere Verwijderen Retirez
	Optional Opcional Optional Opcional Opzionale Optie En option
	Security Wrench Llave de seguridad Sicherheitsschlüssel Chave de segurança Chiave di sicurezza Veiligheidssleutel Clé de sécurité

TOOLS REQUIRED FOR INSTALLATION





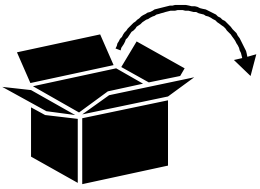
3/16” (included)
5/32” (included)

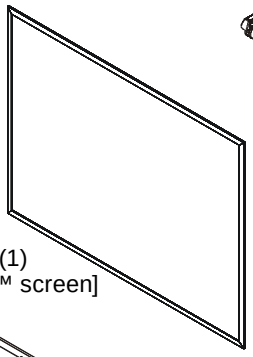


1/2” (12.7mm)

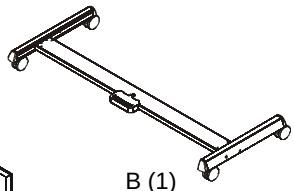
#2

PARTS

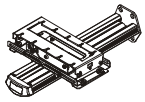




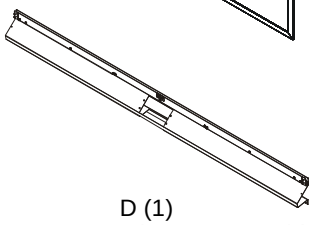
A (1)
[IDEA™ screen]



B (1)
[leg and cross bar assembly]



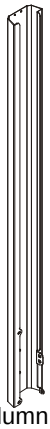
C (1)
[projector boom arm]



D (1)
[screen tray and cross assembly]

G (1)
[height-adjust beam]

H (2)
[side column]



J (1)
[right column extender]

K (1)
[left column extender]

EBeam Interactive Kit (1)

Quick Start Guide

HH (1)
[stylus]

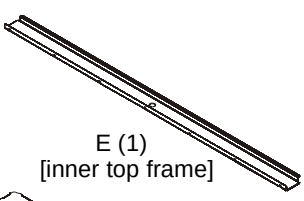
JJ (1)
[interactive software]

KK (1)
[AAA battery]

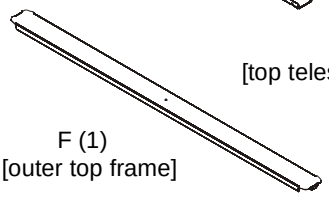
LL (4)
[stylus replacement tips]

MM (1)
[stylus wrist strap kit]

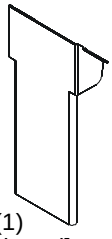
Interactive Software Guide



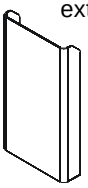
E (1)
[inner top frame]



F (1)
[outer top frame]



L (1)
[top telescoping shroud]



M (1)
[base telescoping shroud]

N (2)
[stud strip]

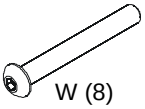
P (4)
[cable clip]

R (4)
[knob]

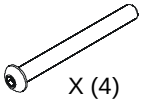
T (6)
#10-24”

U (8)
[Bushing]

V (2)
#10-24”



W (8)
5/16-18 x 2 1/2”



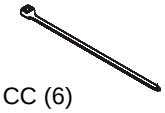
X (4)
1/4-20 x 2 1/2”

Y (8)
5/16”

Z (4)
1/4”

AA (2)
1/4-20 x 3/8”

BB (10)
#10-24 x 3/8”



CC (6)
[cable tie]

DD (1)
3/16”

EE (1)
5/32”

FF (1)
[dry-erase marker kit]

GG (10)
1/4 x 1 1/4”

Assembly And Installation

Cart Assembly

1. Use eight 5/16-18 x 2 1/2" button head cap screws (W) and eight 5/16" washers (Y) to secure two side columns (H) to leg and cross bar assembly (B). (See Figure 1)

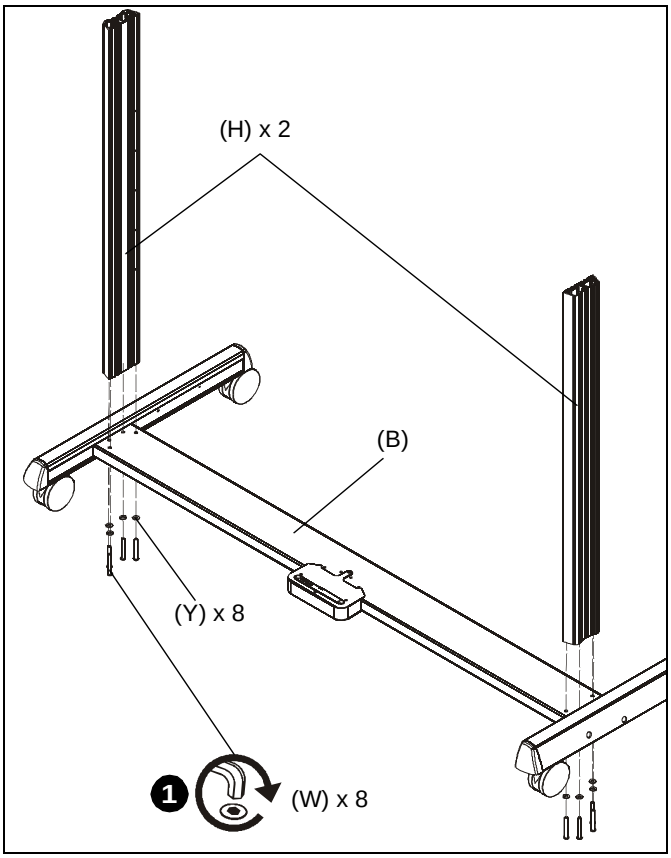


Figure 1

IMPORTANT ! : If using side columns (H) for cable management, install cable clips (P) to side columns prior to installing column extenders to side columns. Square nuts (V) will not be able to slide along the full channels if extenders are already attached. See Cable Management section for side column cable management installation instructions.

2. Slide two column extenders (J and K) over side columns (H). (See Figure 2)

NOTE: Make sure right column extender (J) is installed over right column and left column extender (K) is installed over left column.

3. Line up holes on extenders with holes on side columns at desired mounting height. (See Figure 2)

IMPORTANT ! : Setting the mounting height at this point is much easier than adjusting it after the screen has been installed. Make sure column extenders are set at desired height prior to installing screws in the next step.

4. Use two #10-24 x 3/8" Phillips pan machine screws (BB) to secure each column extender (J and K) to corresponding side column (H). (See Figure 2)

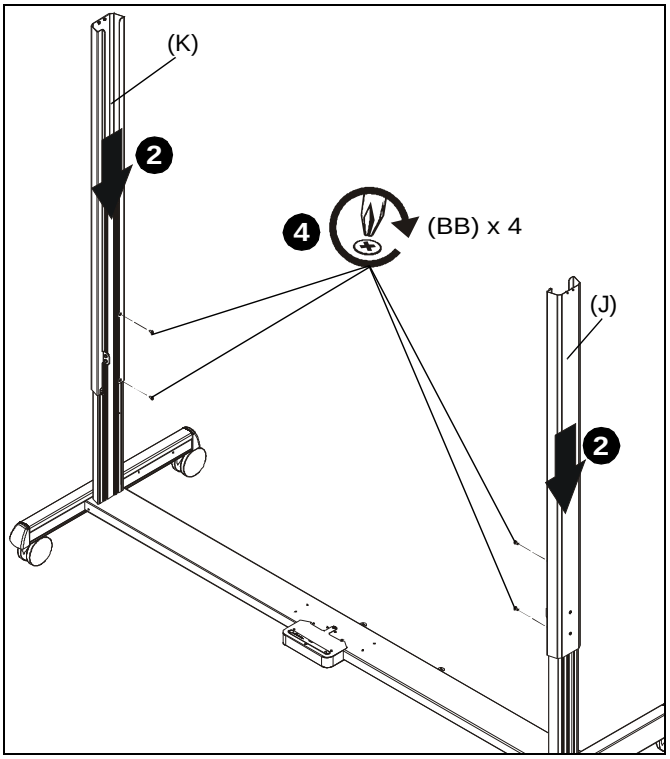


Figure 2

5. Use four #10-24 Phillips pan machine screws (BB) and four 1/4" washers (Z) to secure screen tray and cross assembly (D) to column extenders (J and K). (See Figure 3)

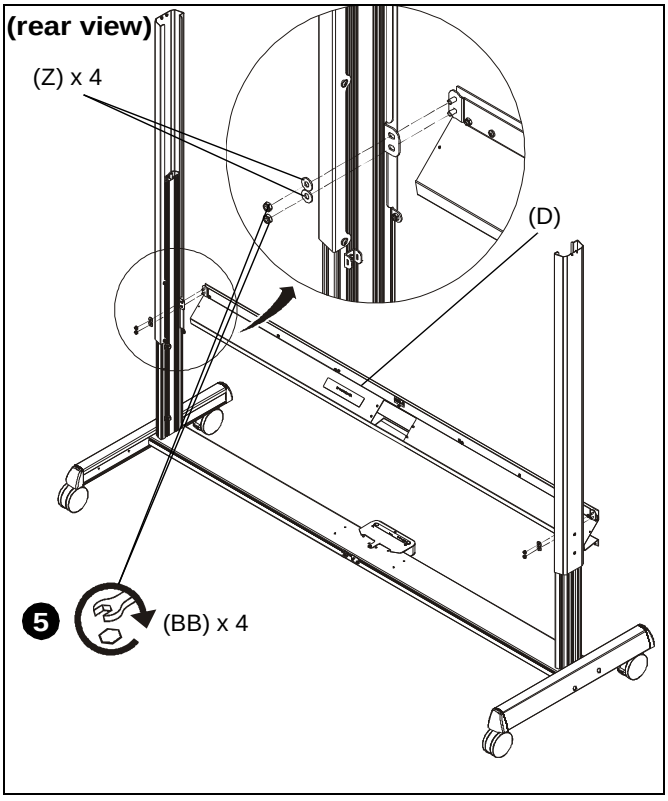


Figure 3

6. Slide height-adjust beam (G) inside top telescoping shroud (L) in preparation for installation to cart. (See Figure 4)
7. Install top telescoping shroud (L) with height-adjust beam (G) into opening of screen tray and cross assembly (D). (See Figure 4)
8. Use four 1/4-20 x 2 1/2" button head cap screws (X) and four 1/4" washers (Z) to secure height-adjust beam (G) and base telescoping shroud (M) to cross bar assembly (B). (See Figure 4)

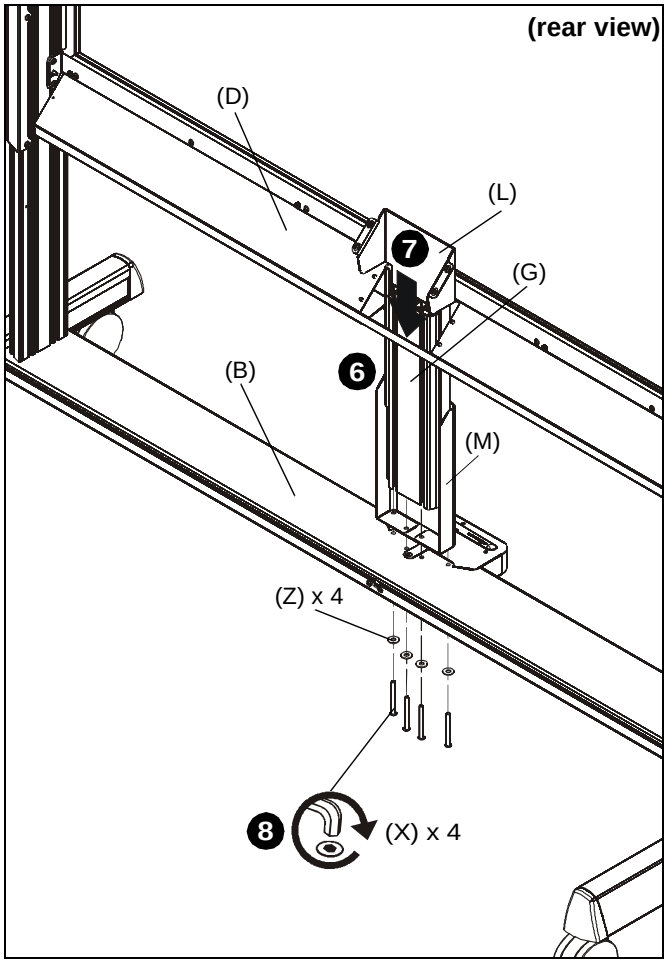


Figure 4

9. Use four #10-24 hex nuts to secure top telescoping shroud (L) to screen tray and cross assembly (D). (See Figure 5)
10. Slide two stud strips (N) into channels on height-adjust beam (G). (See Figure 5)

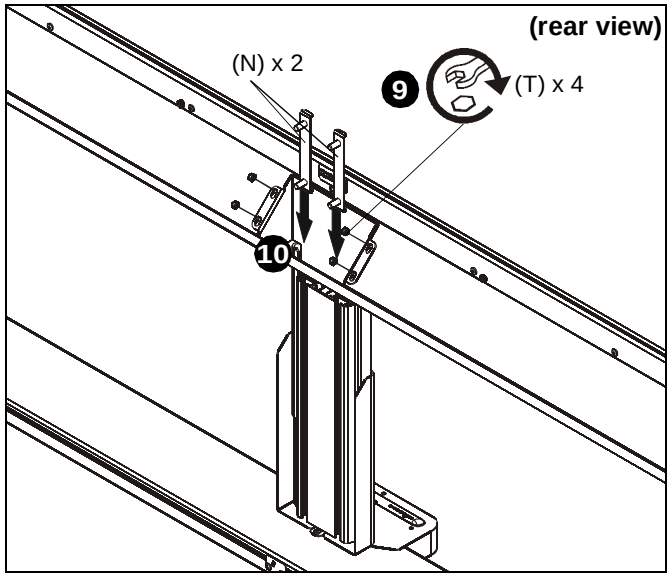


Figure 5

11. Use four knobs (R), ten 1/4 x 1 1/4" washers (GG), and eight bushings (U) to attach projector boom arm (C) to height-adjust beam by screwing them onto studs of each stud strip (N). (See Figure 6)

NOTE: Stack two 1/4 x 1 1/4" washers (GG) on top of each other onto lower studs. (See Figure 6)

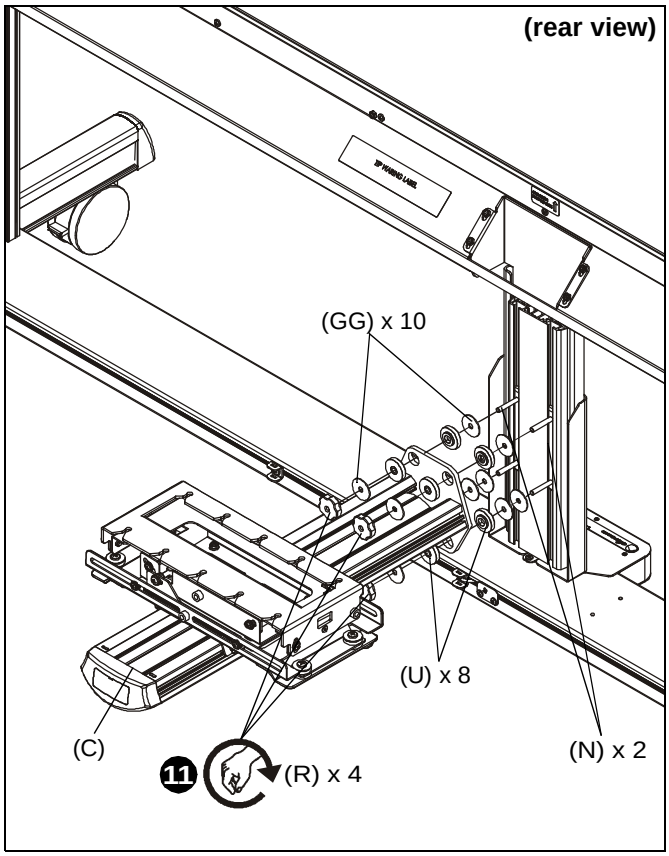


Figure 6

IDEA™ Screen Installation

1. Slide inner top frame (E) into outer top frame (F), making sure screws on inner frame are aligned with holes on outer top frame. (See Figure 7)

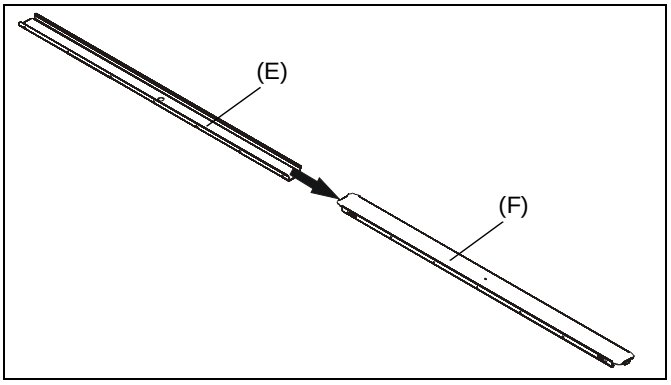


Figure 7

CAUTION: Do NOT touch back of IDEA™ screen during installation or projection surface may be damaged!

2. Carefully slide IDEA™ screen into cart, inserting it into the grooves at the back of the column extenders (J and K) and making sure it is fully seated in the top groove of the screen tray and cross assembly (D). (See Figure 8)
3. While holding the screen in place, set inner and outer top frames (E and F) on top of screen. (See Figure 8)

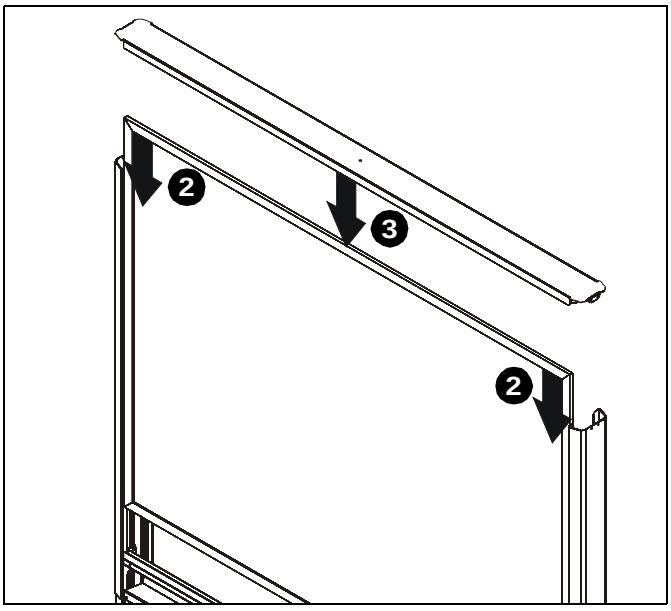


Figure 8

4. Use four #10-24 x 3/8" Phillips machine pan screws (BB) to secure outer top frame (F) to column extenders (J and K). (See Figure 9)
5. Turn seven screws pre-installed on inner top frame (E) counter-clockwise until screen is tightly secured. (See Figure 9)

CAUTION: Do NOT over-tighten screws or screen may be damaged!

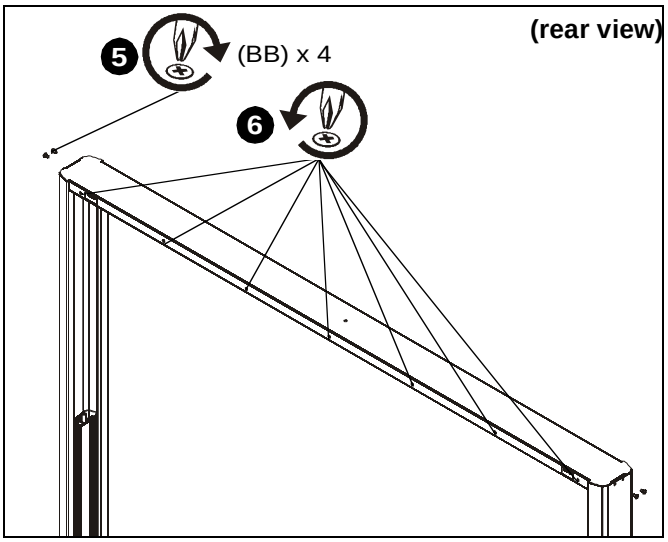


Figure 9

Projector Installation

CAUTION: Make sure knobs (R) are tightened prior to installing projector to projector boom arm! Boom arm may fall off if knobs are not secured.

1. Attach interface bracket to projector following interface bracket installation instructions.
2. Lower projector and attached interface onto top bracket of projector mounting assembly on projector boom arm. (See Figure 10)
3. Slide projector with interface into mounting slots in top bracket until mounting screws are seated against the back of mounting slots. (See Figure 10)
4. Tighten mounting screws until projector is securely mounted to mounting assembly. (See Figure 10)

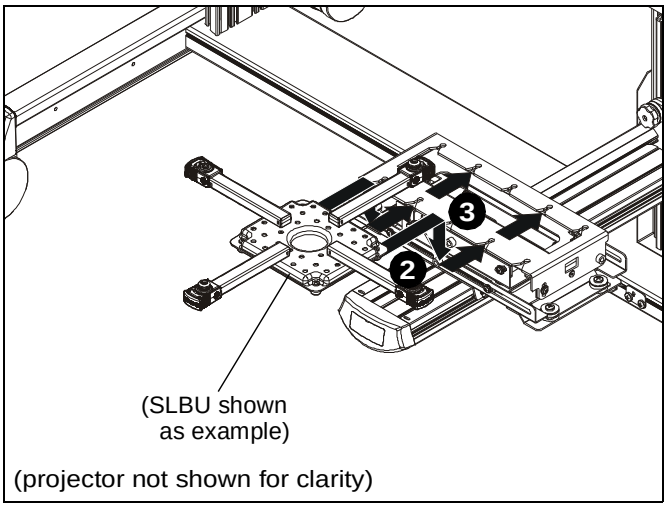


Figure 10

Cable Management

On Side Columns (Monitor Arm Accessory)

1. Slide two #10-24 square nuts (V) into side columns (H) prior to attaching column extenders (J and K). (See Figure 11)
2. Install two #10-24 x 3/8" Phillips pan machine screws (BB) through two cable clips (P) and into #10-24 square nuts (V). (See Figure 11)

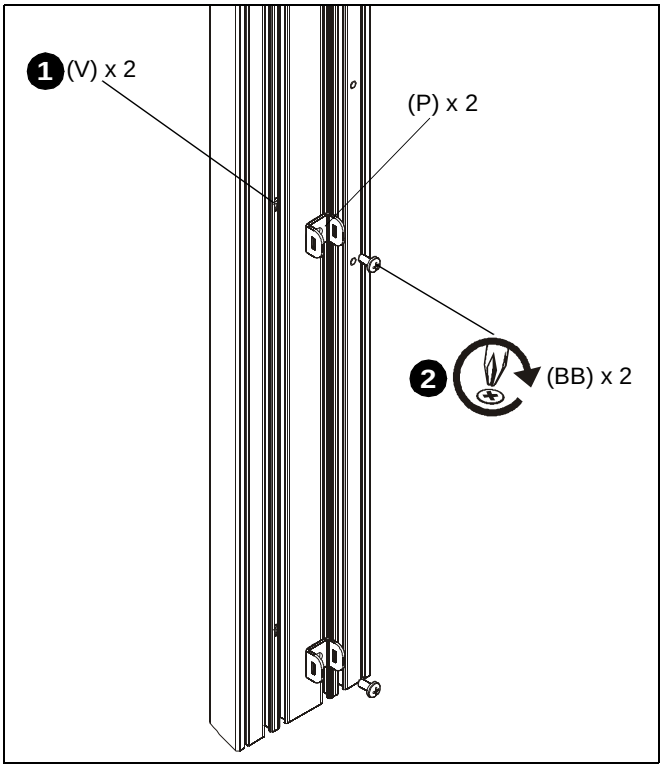


Figure 11

3. Route cables through cable clips and use cable ties (CC) to secure cables along side column. (See Figure 12)

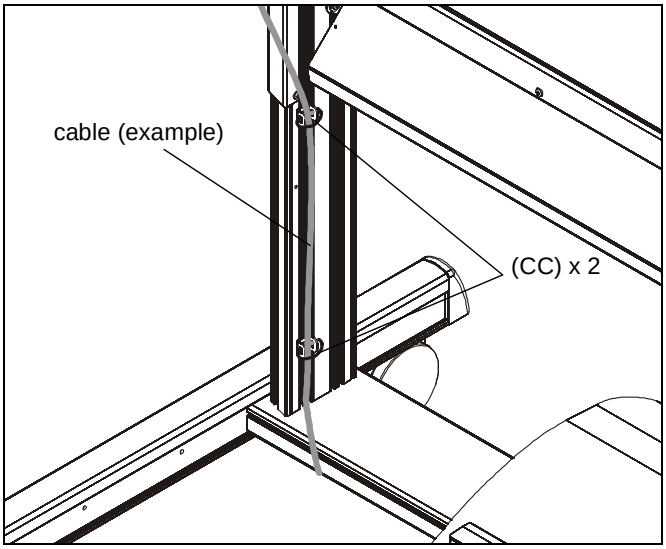


Figure 12

From Projector

4. Use two 1/4-20 x 3/8" Phillips pan machine screws (AA) to secure two cable clips (P) along base of cross bar assembly. (See Figure 13)

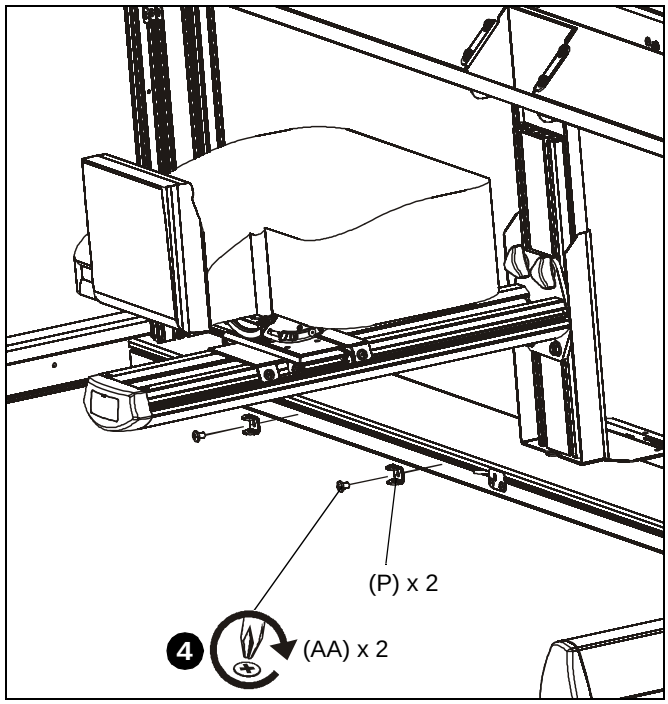


Figure 13

5. (Optional) Route cables from projector through boom arm channel down to cross bar assembly base. (See Figure 14)
6. Route cables through cable clips and use cable ties (CC) to secure cables along cross bar assembly base. (See Figure 14)

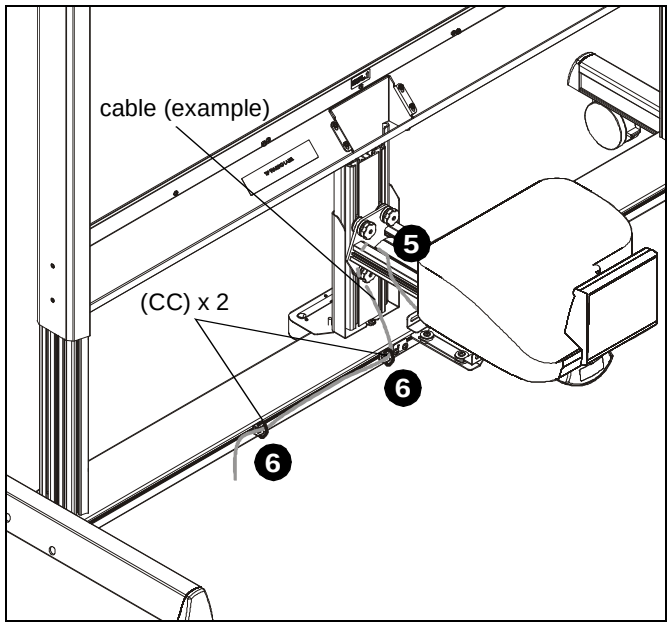


Figure 14

Adjustments

Height Adjustments

IDEA™ Screen

CAUTION: Make sure top frame is supported prior to removing screws to prevent screen from falling during height-adjustment!

1. Remove two screws connecting column extenders (J and K) to each side column (H). (See Figure 15)
2. Adjust height of screen to desired height and line up holes on column extenders with holes on side columns. (See Figure 15)
3. Use two removed screws to reattach each column extender to each side column at desired height. (See Figure 15)

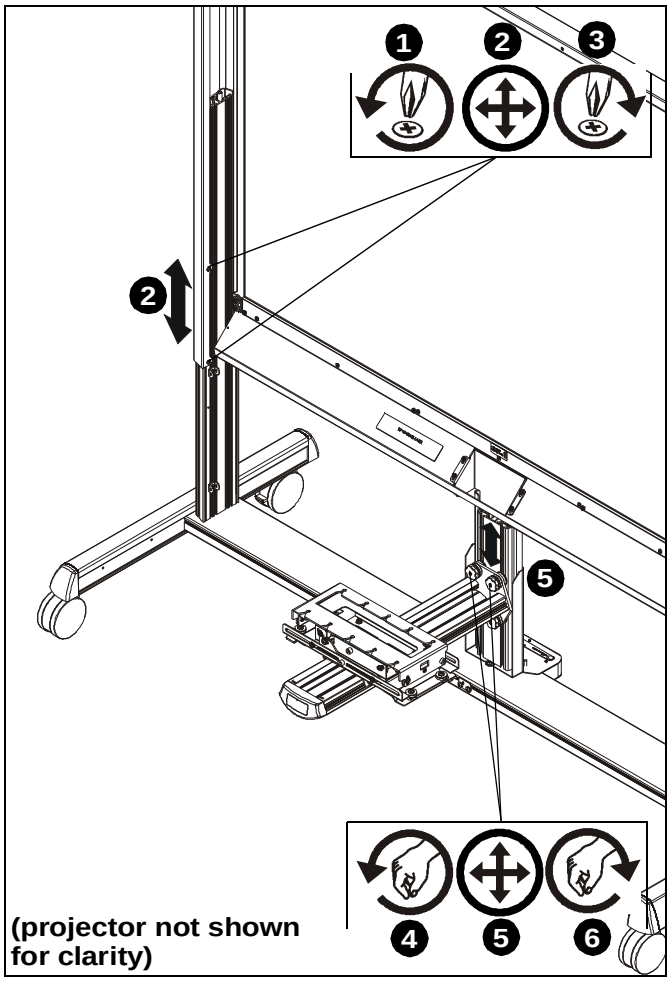


Figure 15

Projector

4. Loosen four knobs (R) securing projector boom arm to height-adjust beam. (See Figure 15)
5. Adjust boom arm height to desired height. (See Figure 15)
6. Tighten four knobs (R) to see arm at desired position. (See Figure 15)

Projector Location Adjustments

Boom Arm Position

1. Loosen thumb screws holding base bracket to projector arm. (See Figure 16)
2. Slide projector along projector arm until desired projector position is reached. (See Figure 16)
3. Tighten thumb screws holding base bracket to projector arm. (See Figure 16)

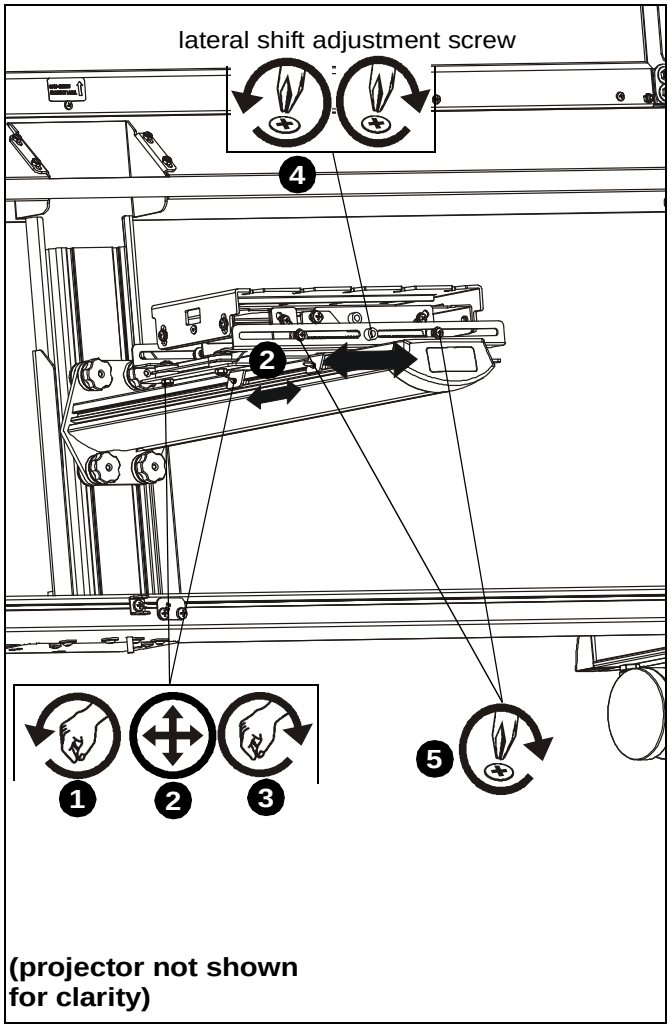


Figure 16

Lateral Shift

4. Turn lateral shift screw in either direction to adjust lateral shift position. (See Figure 16)
5. Tighten two Phillips pan machine screws to secure lateral shift position. (See Figure 16)

CAUTION: Do not slide projector too far to either side of lateral shift plate or projector may slide off plate!

6. Tighten two thumb screws on either side of lateral shift plate that were loosened in Step 4. (See Figure 16)

Pitch Adjustment

7. Turn pitch adjustment screw in either direction to adjust pitch. (See Figure 17)

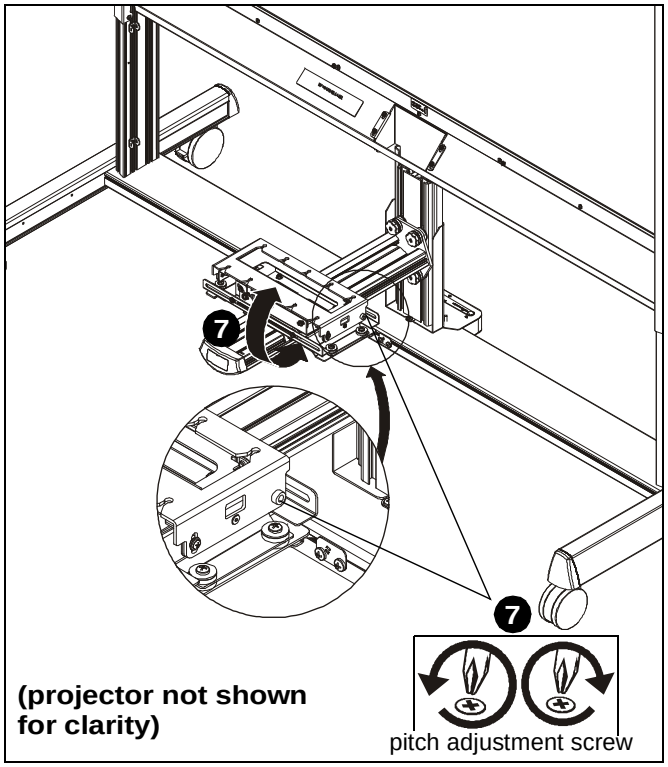


Figure 17

Yaw Adjustment

8. Turn yaw adjustment screw in either direction to adjust yaw position. (See Figure 18)

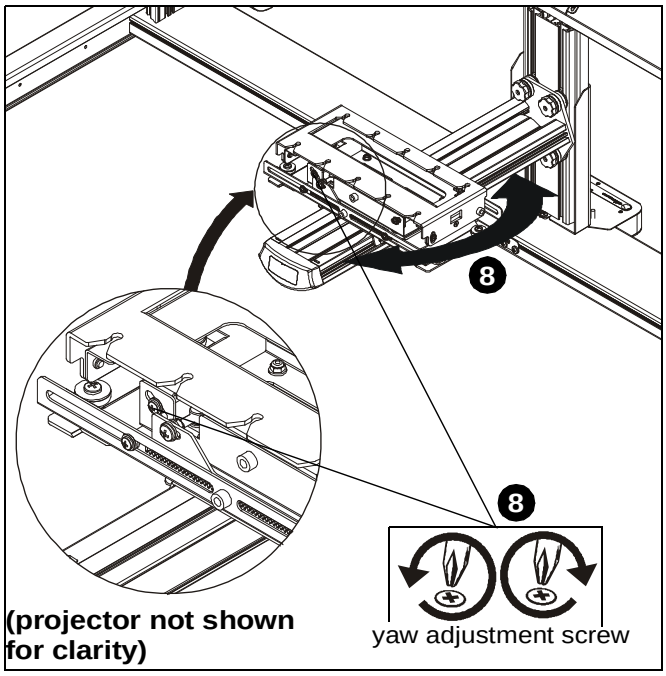


Figure 18

Roll Adjustment

9. Turn roll adjustment screw in either direction to adjust yaw position. (See Figure 19)

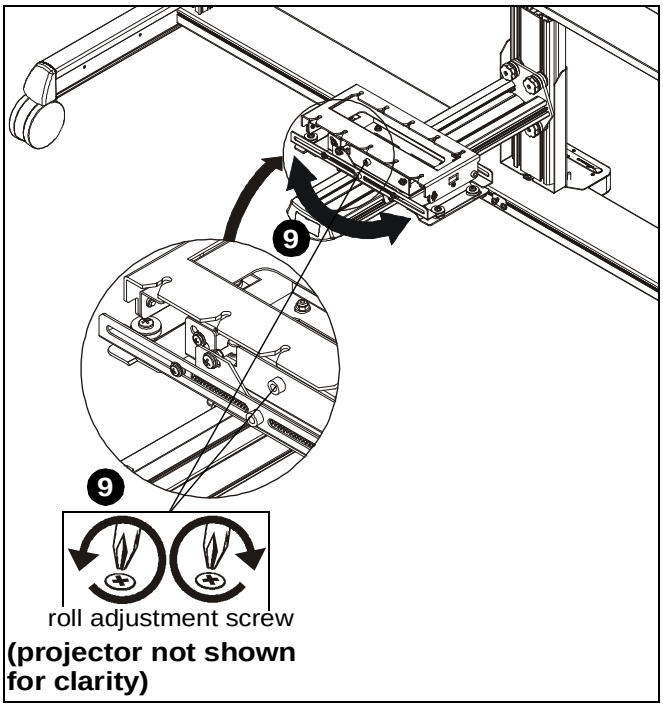


Figure 19

10. Tighten ALL Phillips screws on projector head assembly after final position has been reached. (See Figure 20)

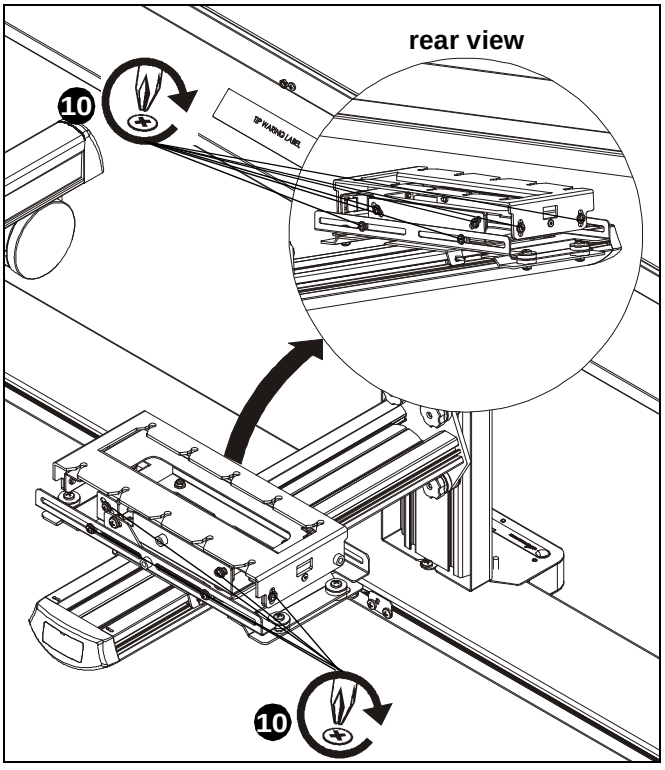


Figure 20

eBeam Troubleshooting

1. Perform the grid test to see if there are any inconsistencies.
   a. Open eBeam software (See Figure 21)

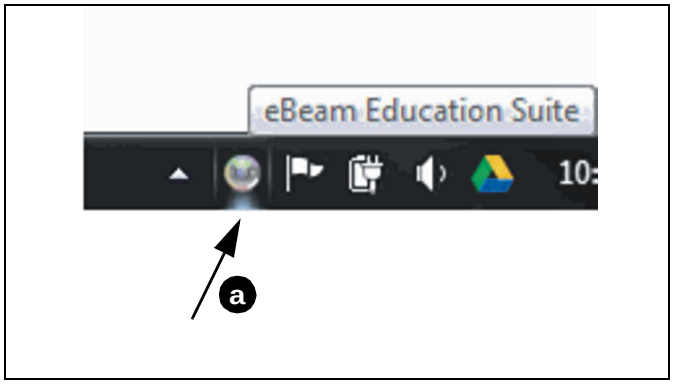


Figure 21

   b. Go to Full Screen view (See Figure 22)

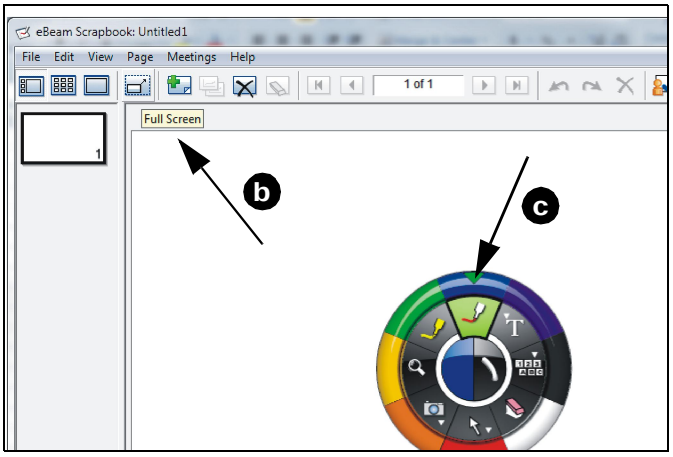


Figure 22

   c. Select Pen Mode (See Figure 22)
   d. Draw a grid on the screen with lines approximately 2" apart.
      - A failed grid test will show distorted annotation lines. (See Figure 23)
      - A passed grid test will show no broken or distorted annotation lines. (See Figure 23)

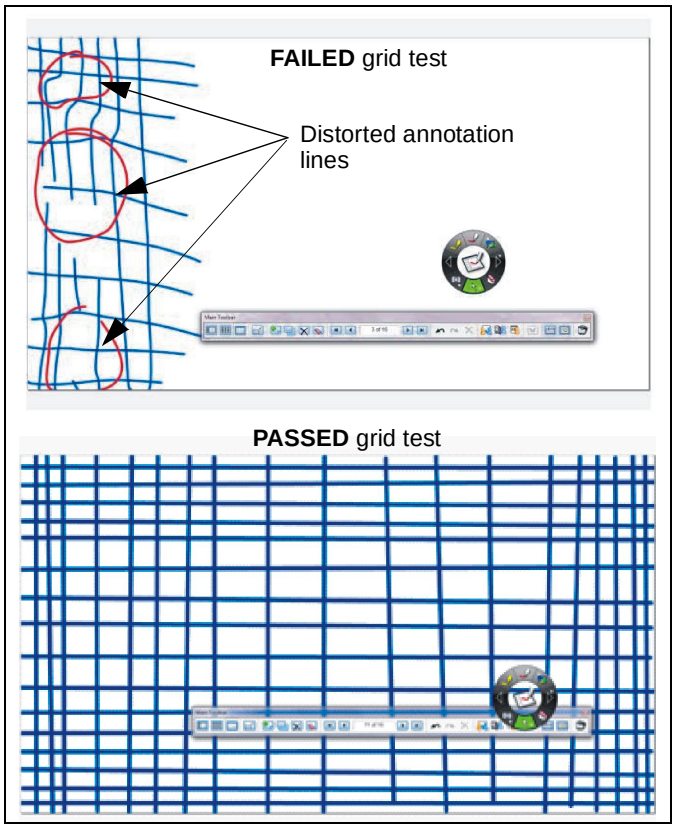
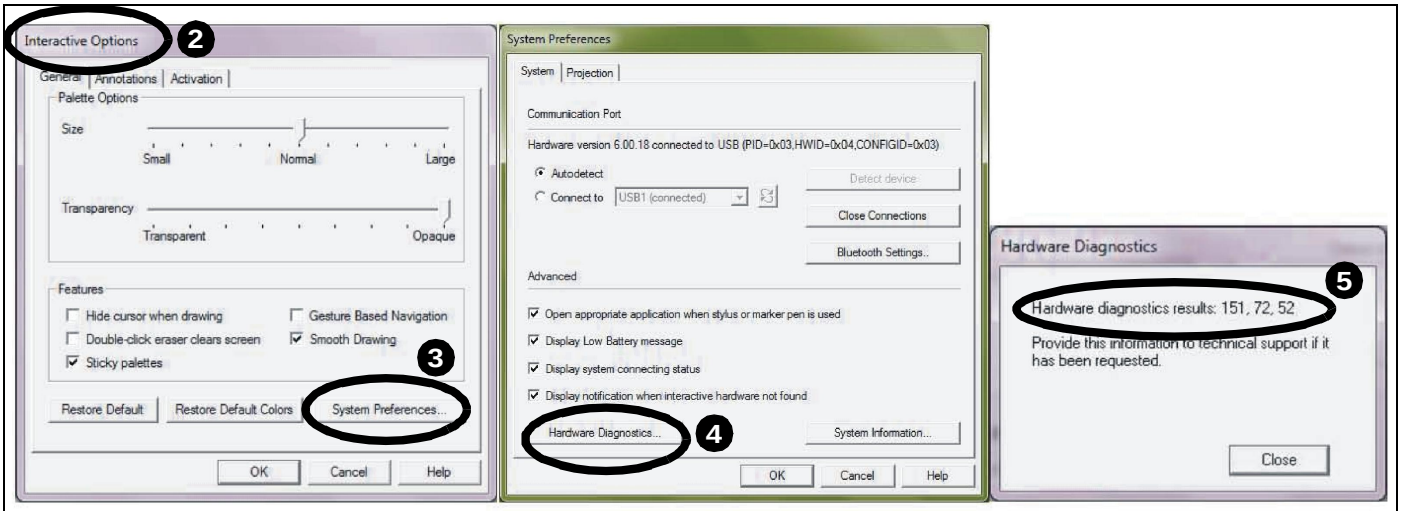


Figure 23

5. If the grid test has failed, gradually move the sensor assembly in 1/2” increments in both the depth and lateral extension ranges until the grid test is passed.
6. If the interactive area is not responding precisely after the grid tests, proceed to **Checking System Diagnostics** section.

Checking System Diagnostics

1. Right click on the E-Beam icon on the system tray to open the software.
2. Select *Interactive Options.* (See Figure 24)
3. Select *System Preferences.*
4. Select *Hardware Diagnostics.*
5. Record the 3 numbers that appear in Hardware Diagnostics (See Figure 24)
6. Compare hardware diagnostics results to table below. (Example: The hardware diagnostics numbers are: **151, 72, 52** and indicate the sensor is near an ultrasonic device that causes interference.) (See Figure 24)
7. If interferences are detected, separate FCI/PACI from ultrasonic or IR interferences and try the set-up again.
8. If questions remain, contact Da-Lite Customer Service.



1st Number Ultrasound Sensor	2nd Number Ultrasound Sensor	3rd Number IR Sensor	Unit	Environment	Resolution
-1	-1	-1	Bad Sensor (if any number is -1)	N/A	Replace interactive receiver
<100	<100	<100	Good	Good	Enjoy interactive!
100+	<100	<100	Good	Ultrasonic (40 Hz) Source Nearby	Identify source of ultrasonic emissions. Remove source, or move interactive sensor.
100+	100+	<100	Bad Sensor	N/A	Replace interactive receiver
<100	<100	100+	Good	IR Source Nearby	Identify source of IR emissions. Remove source, or move interactive sensor.

Figure 24

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Da-Lite Screen Company, LLC
3100 North Detroit Street
P.O. Box 137
Warsaw, IN 46581-0137
Phone: 800.267.8101
Toll Free: 574.267.3737
Fax: 574.267.7804
Toll Free Fax: 877.325.4832
www.da-lite.com
info@da-lite.com

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